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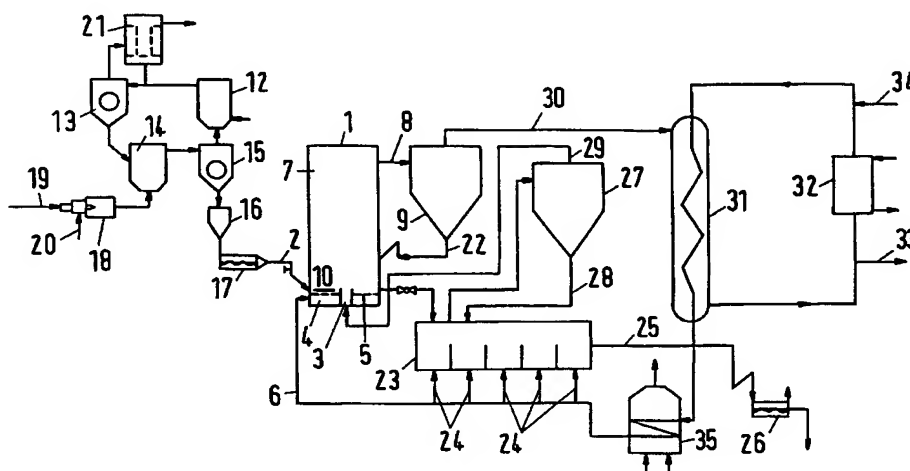
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- (54) Title: METHOD AND PLANT FOR THE HEAT TREATMENT OF SOLIDS CONTAINING IRON OXIDE**



**(57) Abstract:** A method for the heat treatment of solids containing iron oxide, in which fine-grained solids are heated to a temperature of about 630°C in a fluidized-bed reactor (1). To improve the utilization of energy, it is proposed to introduce a first gas or gas mixture from below through a supply tube (3) into a mixing chamber (7) of the reactor (1), the gas supply tube (3) being at least partly surrounded by a stationary annular fluidized bed (10) which is fluidized by supplying fluidizing gas. The gas velocities of the first gas or gas mixture and of the fluidizing gas for the annular fluidized bed (10) are adjusted such that the Particle-Froude-Numbers in the gas supply tube (3) are between 1 and 100, in the annular fluidized bed (10) between 0.02 and 2, and in the mixing chamber (7) between 0.3 and 30.

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/14106

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C22B5/14 C22B1/10

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C22B B01J C21B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 44 10 093 C (METALLGESELLSCHAFT AG) 9 March 1995 (1995-03-09) abstract	1-18
A	--- US 4 806 158 A (HIRSCH MARTIN ET AL) 21 February 1989 (1989-02-21) abstract	1-18
A	--- US 4 789 580 A (HIRSCH MARTIN ET AL) 6 December 1988 (1988-12-06) abstract	1-18
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☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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